

What is claimed is:

1. A light mounting panel for connecting to a luminaire frame, comprising:
 - a base having an upper surface and a lower surface and having first, second, third and fourth outer edges, said base having an opening and an inner edge defining said opening, said first outer edge being opposite said second outer edge and said third outer edge being opposite said fourth outer edge;
 - first, third and fourth walls extending upwardly from said upper surface of said base at said first, third and fourth outer edges, respectively, and contactable with internal flanges of the existing luminaire frame to align said mounting panel with the existing luminaire frame during installation;
 - a second wall extending upwardly and inwardly from said upper surface of said base at said second outer edge;
 - a first fixed tab extending laterally outwardly from said first wall to engage a first slot in the luminaire frame; and
 - a second tab extending outwardly from said second wall and being movable between an insertion position within a periphery of said base and an installed position extending laterally outwardly from said periphery to engage a second slot in the luminaire frame.
2. A light mounting panel according to claim 1, wherein
 - said opening in said base is quadrilateral having first, second, third and fourth inner edges, said first inner edge is opposite said second inner edge and said third inner edge is opposite said fourth inner edge.
3. A light mounting panel according to claim 2, further comprising
 - a third tab extends substantially perpendicularly from each of said third and fourth inner edges for supporting a ballast box and positioning the ballast box between said third and fourth outer edges of said base.

4. A light mounting panel according to claim 3, further comprising
a fourth tab extends substantially perpendicularly from said upper surface
of said base for supporting the ballast box and positioning the ballast box between said
first and second outer edges of said base.
5. A light mounting panel according to claim 4, wherein
said fourth tab is oriented substantially perpendicularly to said third tab.
6. A light mounting panel according to claim 1, wherein
said first, third and fourth walls extend substantially perpendicularly from
said upper surface of said base at said first, third and fourth outer edges.
7. A light mounting panel according to claim 1, wherein
said second wall extends at an acute angle from said upper surface of said
base at said second outer edge.
8. A light mounting panel according to claim 1, wherein
said first tab extends substantially perpendicularly from said first wall.
9. A light mounting panel according to claim 1, wherein
a slot extends through said base adjacent to said second tab for receiving a
tool to move said second tab from the insertion position to the installed position.
10. A light mounting panel according to claim 1, wherein
notches extend in said second wall on both sides of said second tab.
11. A light mounting assembly according to claim 1, wherein
said base, said first, second, third and fourth base walls, and said first and
second tabs are unitarily formed.

12. A light mounting assembly, comprising:

a frame having a frame base, a frame inner edge defining a frame opening in said frame base, a frame inner wall extending upwardly from said frame inner edge, a first slot and second slot in said frame inner wall, and a frame flange extending inwardly from said frame inner wall;

a base having an upper and a lower surface and having first, second, third and fourth outer edges, said base having an opening and an inner edge defining said opening, said first outer edge being opposite said second outer edge, said third outer edge being opposite said fourth outer edge;

first, third and fourth base walls extending upwardly from said upper surface of said base at said first, third and fourth outer edges and being engagable with said frame flange to align said mounting panel with said frame during installation;

a second base wall extending upwardly and inwardly from said upper surface of said base at said second outer edge;

a first tab extending outwardly from said first base wall to engage a first slot in said frame; and

a second tab extending outwardly from said second base wall and being movable between an insertion position within a periphery of said base and an installed position extending laterally from said periphery to engage said second frame slot.

13. A light mounting assembly according to claim 12, wherein

said opening in said base is quadrilateral having first, second, third and fourth inner base edges, said first inner base edge being opposite said second inner base edge, said third inner base edge being opposite said fourth inner base edge.

14. A light mounting assembly according to claim 13, further comprising

a third tab extends substantially perpendicularly from each of said third and fourth inner base edges supporting a ballast box and positioning said ballast box between said third and fourth outer edges of said base.

15. A light mounting assembly according to claim 14, wherein
a fourth tab extends substantially perpendicularly from said upper surface
of said base for supporting said ballast box, and positions said ballast box between said
first and second outer edges of said base.
16. A light mounting assembly according to claim 12, wherein
said frame opening is quadrilateral; and
said first frame slot is opposite said second frame slot.
17. A light mounting assembly according to claim 12, wherein
said first, third and fourth base walls extend substantially perpendicularly
from said upper surface of said base at said first, third and fourth outer edges thereof.
18. A light mounting assembly according to claim 12, wherein
said second base wall extends at an acute angle from said upper surface of
said base at said second outer edge.
19. A light mounting assembly according to claim 12, wherein
said first tab extends substantially perpendicularly from said first base
wall.
20. A light mounting assembly according to claim 12, wherein
a slot extends through said base adjacent to said second tab to receive a
tool to move said second tab from said insertion position to said installed position.
21. A light mounting assembly according to claim 12, wherein
notches extend in said second base wall on both sides of said second tab.
22. A light mounting assembly according to claim 15, wherein
said fourth tab is oriented substantially perpendicularly to said third tab.

23. A light mounting assembly according to claim 1, wherein

said base, said first, second, third and fourth base walls, and said first and second tabs are unitarily formed.

24. A luminaire assembly, comprising:

a base having an upper surface and a lower surface and having first, second, third and fourth outer edges, said first outer edge being opposite said second outer edge, said third outer edge being opposite said fourth outer edge, said base having a quadrilateral opening and first, second, third and fourth inner edges defining said opening, said first inner edge being opposite said second inner edge, said third inner edge being opposite said fourth inner edge;

first, third and fourth walls extending substantially perpendicularly from said upper surface of said first, third and fourth outer edges of said base;

a second wall extending inwardly from said upper surface of said second outer edge of said base;

at least one first tab extending outwardly substantially perpendicularly from said first wall for engaging a first slot in a luminaire frame;

at least one second tab extending outwardly from said second wall for engaging a second slot in the luminaire frame, said at least one second tab being deformable;

a ballast box positioned on said upper surface of said base above said opening in said base; and

an optical assembly attached to said ballast box.

25. A luminaire assembly according to claim 24, wherein

at least one third tab extends substantially perpendicularly from each of said third and fourth inner edges supporting and positioning said ballast box between said third and fourth outer edges of said base.

26. A luminaire assembly of claim 25, wherein

at least one fourth tab extends substantially perpendicularly from said upper surface of said base supporting and positioning said ballast box between said first and second outer edges of said base.

27. A luminaire assembly according to claim 26, wherein

said at least one fourth tab is oriented substantially perpendicularly to said at least one third tab.

28. A luminaire assembly according to claim 24, wherein

a slot extends in said base adjacent to said at least one second tab to receive a tool for deforming said at least one second tab to engage said at least one second tab with the second slot in the luminaire frame.

29. A luminaire assembly of claim 24, wherein

notches extend in said second wall on both sides of each said at least one second tab.

30. A light mounting panel for connecting to a luminaire frame, comprising:

a base having an upper surface and a lower surface and having first, second, third and fourth outer edges, said base having an opening and an inner edge defining said opening, said first outer edge being opposite said second outer edge and said third outer edge being opposite said fourth outer edge;

a first wall extending from said upper surface of said base at said first outer edge;

third and fourth walls extending upwardly from said upper surface of said base at said third and fourth outer edges, respectively, and contactable with internal flanges of the existing luminaire frame to align said mounting panel with the existing luminaire frame during installation;

a second wall extending upwardly and inwardly from said upper surface of said base at said second outer edge;

a first fixed tab for engaging the luminaire frame; and
a second tab being movable between an insertion position and an installed position for engaging the luminaire frame.

31. The light mounting panel of claim 30, wherein
said first fixed tab extends laterally outwardly from said second wall to engage a first slot in the luminaire frame.
32. A light mounting panel of claim 30, wherein
said second movable tab extends outwardly from said first wall to engage a second slot in the luminaire frame.
33. A light mounting panel of claim 30, wherein
said first fixed tab extends upwardly and outwardly from said second wall to engage a first internal flange of the luminaire frame.
34. A light mounting panel of claim 30, wherein
said second movable tab is attached to said upper surface of said base proximal to said first wall to engage a second internal flange of the luminaire frame.
35. A light mounting panel according to claim 30, wherein
said opening in said base is quadrilateral having first, second, third and fourth inner edges, said first inner edge is opposite said second inner edge and said third inner edge is opposite said fourth inner edge.
36. A light mounting panel according to claim 30, further comprising
a third tab extending substantially perpendicularly from each of said third and fourth inner edges to support a ballast box and position the ballast box between said third and fourth outer edges of said base.

37. A light mounting panel according to claim 30, further comprising
a fourth tab extending substantially perpendicularly from said upper
surface of said base to support a ballast box and position the ballast box
between said first and second outer edges of said base.
38. A light mounting panel according to claim 37, wherein
said fourth tab is oriented substantially perpendicularly to said third tab.
39. A light mounting panel according to claim 30, wherein
said first, third and fourth walls extend substantially perpendicularly from
said upper surface of said base at said first, third and fourth outer edges.
40. A light mounting panel according to claim 30, wherein
said second wall extends at an acute angle from said upper surface of said
base at said second outer edge.
41. A light mounting panel according to claim 34, wherein
a first slot extends through said base and a second slot extends through
said second tab to receive a tool to move said second tab from the
insertion position to the installed position.
42. A light mounting panel according to claim 32, wherein
notches extend in said second wall on both sides of said second tab.
43. A light mounting assembly according to claim 30, wherein
said base, said first, second, third and fourth base walls, and said first and
second tabs are unitarily formed.
44. A light mounting assembly according to claim 30, wherein
said base, said first, second, third and fourth base walls, and said first tab
are unitarily formed.

45. A light mounting panel according to claim 44, wherein
said second tab is attached to said upper surface of said base by a method
selected from the group consisting of welding, spot welding, pot-riveting
and fasteners.
46. A light mounting panel according to claim 30, wherein
said first wall extends inwardly along said upper surface of said base, and
said second tab extends upwardly from said first wall to engage a second
internal flange .
47. A light mounting panel,
a base having an upper surface and a lower surface and having first,
second, third and fourth outer edges, said base having an opening and an inner edge
defining said opening, said first outer edge being opposite said second outer edge and
said third outer edge being opposite said fourth outer edge;
a first wall extending inwardly from said upper surface of said base at said
first outer edge;
third and fourth walls extending upwardly from said upper surface of said
base at said third and fourth outer edges, respectively, and contactable with internal
flanges of the existing luminaire frame to align said mounting panel with the existing
luminaire frame during installation;
a second wall extending upwardly and inwardly from said upper surface of
said base at said first outer edge;
a first fixed tab extending outwardly from said second wall to engage the
luminaire frame internal flanges; and
a second tab extending upwardly from said first wall and being movable
between an insertion position and an installed position to engage the luminaire frame
internal flanges.

48. A light mounting panel according to claim 47, wherein
said opening in said base is quadrilateral having first, second, third and
fourth inner edges, said first inner edge is opposite said second inner edge
and said third inner edge is opposite said fourth inner edge.
49. A light mounting panel according to claim 48, wherein
a third tab extends substantially perpendicularly from each of said third
and fourth inner edges for supporting a ballast box and positioning the
ballast box between said third and fourth outer edges of said base.
50. A light mounting panel according to claim 49, further comprising
a fourth tab extends substantially perpendicularly from said upper surface
of said base for supporting the ballast box and positioning the ballast box
between said first and second outer edges of said base.
51. A light mounting panel according to claim 50, wherein
said fourth tab is oriented substantially perpendicularly to said third tab.
52. A light mounting panel according to claim 47, wherein
said first, third and fourth walls extend substantially perpendicularly from
said upper surface of said base at said first, third and fourth outer edges.
53. A light mounting panel according to claim 47, wherein
said second wall extends at an acute angle from said upper surface of said
base at said second outer edge.
54. A light mounting panel according to claim 47, wherein
said first tab forms an acute angle with said second wall.

55. A light mounting panel according to claim 47, wherein
a slot extends through said base for receiving a tool to move said second
tab from the insertion position to the installed position.
56. A light mounting panel according to claim 47, wherein
said second tab is substantially L-shaped.
57. A light mounting panel according to claim 47, wherein
said base, said first, second, third and fourth base walls, and said first and
second tabs are unitarily formed.
58. A light mounting panel according to claim 47, wherein
a ballast box is positioned on said upper surface of said base above said
opening in said base; and
an optical assembly is attached to said ballast box.
59. A light mounting panel according to claim 47, wherein
said first wall extends inwardly along said upper surface of said base.